Page 1 of 3 ATTY. DOCKET NO. APPLICATION NO. 10/005,876 0942.5340002/RWE/BJD/JKM FORM PTO-1449 FIRST NAMED INVENTOR Chesnut et al. SIXTH SUPPLEMENTAL PROPERTY INFORMATION DISCLOSURE STATEMENT FILING DATE **ART UNIT** December 7, 2001 1636 **U.S. PATENT DOCUMENTS EXAMINER** INITIAL DOCUMENT NUMBER DATE NAME **CLASS** SUB-CLASS **FILING DATE** AΑ AB AC AD ΑE AF AG AΗ ΑI AJ AK9 2003/0220249 11/27/2003 Hackett et al. 02/07/2003 **FOREIGN PATENT DOCUMENTS** EXAMINER INITIAL DOCUMENT NUMBER DATE COUNTRY CLASS SUB-CLASS **TRANSLATION** Yes AL No Yes AM No Yes AN No Yes AO No Yes AP9 WO 02/00875 01/03/2002 **WIPO** No OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Ohara, O. and Temple, G., "Directional cDNA library construction assisted by the in vitro recombination reaction," Nucleic Acids Research 29:e22(1-8), Oxford University Press 116 (February 15, 2001). Co-Pending U.S. Patent Application No. 10/893,235, Hartley et al., filed July 19, 2004 (Not AS <u>116</u> Published). Hartley, J.L., et al., "DNA Cloning Using In Vitro Site-Specific Recombination," Genome ΑT <u>116</u> Research 10:1288-1795, Cold Spring Harbor Laboratory Press (November 2000). JAMES KETTER **EXAMINER** DATE CONSIDERED PRIMARY EXAMINER 10/13/04

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

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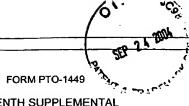
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JAMES KETTER 10/17/04 EXAMINER: Initial if reference the through citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

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EXAMINER

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EXAMINER: Initial if reference considered, whether the citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

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EXAMINER: Initial if reference considered, with Metal district citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

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McKnight, S.L., "Functional Relationships between Transcriptional Control Signals of the Thymidine Kinase Gene of Herpes Simplex Virus," *Cell* 31:355-365, MIT (1982)

ATTY. DOCKET NO. 0942.5340002/RWE/BJD/JKM APPLICATION NO. 10/005,876

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FIRST NAMED INVENTOR Chesnut et al. SEVENTH SUPPLEMENTAL FILING DATE **ART UNIT** INFORMATION DISCLOSURE STATEMENT December 7, 2001 1636 **U.S. PATENT DOCUMENTS EXAMINER DOCUMENT NUMBER** DATE NAME SUB-CLASS FILING DATE INITIAL **CLASS** AA AB AC AD AE AF AG AΗ ΑI AJ ΑK **FOREIGN PATENT DOCUMENTS EXAMINER** INITIAL DOCUMENT NUMBER DATE COUNTRY CLASS SUB-CLASS TRANSLATION Yes ΑL No Yes AM No Yes ΑN No Yes AO No Yes AΡ OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Nunes-Düby, S.E., et al., "λ Integrase cleaves DNA in cis," EMBO J. 13:4421-4430, Oxford AR 126 University Press (1994) Odell, J., et al., "Site-directed recombination in the genome of transgenic tobacco," Mol. Gen. AS 126 Genet. 223:369-378, Springer-Verlag (1990) Peterson, B.Ø. and Shuman, S., "Hisitidine 265 Is Important for Covalent Catalysis by Vaccinia Topoisomerase and Is Conserved in All Eukaryotic Type I Enzymes," J. Biol. Chem. ΑT <u>126</u> 272:3891-3896, The American Society for Biochemistry and Molecular Biology, Inc. (February 1997) **EXAMINER** DATE CONSIDERED JAMES KETTER 10/13/04 EXAMINER: Initial if reference considered William Prot citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

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10/13/04 EXAMINER: Initial if reference constitution with next communication to Applicant.

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Page 13 of 14 APPLICATION NO. ATTY, DOCKET NO. 10/005,876 0942.5340002/RWE/BJD/JKM FIRST NAMED INVENTOR Chesnut et al. SEVENTH SUPPLEMENTAE TRANS **FILING DATE ART UNIT** INFORMATION DISCLOSURE STATEMENT December 7, 2001 1636 **U.S. PATENT DOCUMENTS** EXAMINER SUB-CLASS DOCUMENT NUMBER DATE NAME CLASS FILING DATE INITIAL AΑ AB AC AD ΑE ΑF AG ΑH Αl ΑJ ΑK **FOREIGN PATENT DOCUMENTS EXAMINER** INITIAL DOCUMENT NUMBER DATE COUNTRY CLASS SUB-CLASS **TRANSLATION** AL No Yes AM No Yes ΑN No Yes AO No Yes ΑP No OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Stark, W.M., et al., "Catalysis by site-specific recombinases," Trends Genet. 8:432-439, AR 130 Elsevier Science Publishers, Ltd. (1992) Ulmanen, I., et al., "Transcription and Translation of Foreign Genes in Bacillus subtilis by the AS 130 Aid of a Secretion Vector," J. Bacteriol. 162:176-182, American Society for Microbiology (1985)

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van Deursen, J., et al., "Cre-mediated site-specific translocation between nonhomologous mouse chromosomes," Proc. Natl. Acad. Sci. USA 92:7376-7380, National Academy of

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ELECTRONIC INFORMATION DISCLOSURE STATEMENT

Électronic Version v18 Stylesheet Version v18.0

> Title of Invention

Methods and Compositions for Synthesis of Nucleic Acid Molecules Using Multiple Recognition Sites

Application Number:

10/005876

Confirmation Number:

7958

First Named Applicant:

Jonathan Chesnut

Attorney Docket Number: 0942.5340002

Art Unit:

1636

Examiner:

James S Ketter

Search string:

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20020182731 or 20030027289 or 20030054555

or 20030059900 or 20030100110 or

20020172997 or 20020192819 or 20030157716

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or 20040063207 or 20030157662 or

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US Patent Documents

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
	1	6066778	2000-05-23	Ginsburg et al.			•
	2	6720140	2004-04-13	Hartley et al.			

US Published Applications

Note: Applicant is not required to submit a paper copy of cited US Published Applications

init	Cite.No.	Pub. No.	Date	Applicant	Kind	Class	Subclass
1	1	20040053412	2004-03-18	Hartley et al.			
	2	20020182731	2002-12-05	Ji et al.]		
	3	20030027289	2003-02-06	Farmer]		
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	8	20020192819	2002-12-19	Hartley et al.
	9	20030157716	2003-08-21	Hartley et al.
	10	20020094574	2002-07-18	Hartley et al.
	11	20030054552	2003-03-20	Hartley et al.
	12	20030064515	2003-04-03	Hartley et al.
	· 13	20030068799	2003-04-10	Hartley et al.
	14	20030175970	2003-09-18	Hartley et al.
	15	20040063207	2004-04-01	Hartley et al.
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	17	20020007051	2002-01-17	Cheo et al.
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M	AR	<u>112</u>	Institut Pasteur http://www.pasto		gure 2: rche/unites/pmtg/integ/	fig2.html (access	ed 6/19/200	3).	
	AS	112	Institut Pasteur http://www.paste	Website, Fi eur.fr/reche	igure 3: rche/unites/pmtg/integ/	fig3.html (access	ed 6/19/2003	3):	
	AT	112	Institut Pasteur Website, Main page: http://www.pasteur.fr/recherche/unites/pmtg (accessed 6/19/2003).						
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JUN 0 1 2004 B	ATTY. DOCKET NO. 0942.5340002/RWE/BJD/JKM	APPLICATION NO. 10/005,876
FORM PTO-1449	FIRST NAMED INVENTOR Chesnut et al.	
INFORMATION DISCLOSURE STATEMENT	FILING DATE December 7, 2001	ART UNIT 1636

				U.S. PATÉ	NT DOCUMENTS			
EXAMINER INITIAL		DO	CUMENT NUMBER	DATE	NAME	CLAS	S SUB-CLASS	FILING DATE
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	AL							Yes No
	АМ							Yes No
	AN		*					Yes No
	AO							Yes No
	AP							Yes No
	OTHER (Including Author, Title, Date, Pertinent Pages, etc.)							
M	AR	113	Co-Pending U.S 1998 (NOT PUB	. Patent App ILISHED).	lication No. 09/177,38	7, Hartley, J.L.	, <i>et al.</i> , filed O	ctober 23,
	AS	113	Co-Pending U.S 1999 (NOT PUB		lication No. 09/438,35	8, Gerard, G.F	., et al., filed N	November 12,
	AT	113	Co-Pending U.S (NOT PUBLISHI		lication No. 09/517,46	6, Hartley, J.L.	, et al., filed M	larch 2, 2000
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FIRST NAMED INVENTOR Chesnut et al. **FILING DATE**

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U.S. PATENT DOCUMENTS EXAMINER DOCUMENT NUMBER SUB-CLASS FILING DATE DATE NAME CLASS INITIAL AΑ AB AC AD ΑE AF AG AH ΑI ΑĴ ΑK **FOREIGN PATENT DOCUMENTS** EXAMINER DOCUMENT NUMBER INITIAL DATE COUNTRY CLASS SUB-CLASS **TRANSLATION** Yes AL No Yes AM No Yes AN No Yes AO No Yes AP No OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Co-Pending U.S. Patent Application No. 09/648,790, Hartley, J.L., et al., filed August 28, AR 114 2000 (NOT PUBLISHED). Co-Pending U.S. Patent Application No. 09/695,065, Brash, M.A., et al., filed October 25, AS <u>114</u> 2000 (NOT PUBLISHED). Co-Pending U.S. Patent Application No. 09/984,239, Brasch, M.A., et al., filed October 29, ΑT 114 2001 (NOT PUBLISHED). **EXAMINER** DATE CONSIDERED JAMES KETTER 10/17/04 EXAMINER: Initial if reference considered, whether lotted citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

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Ī	ATTY, DOCKET NO.	APPLICATION NO.
	0942.5340002/RWE/BJD/JKM	10/005,876
	FIRST NAMED INVENTOR	
	Chesnut et al.	
	FILING DATE	ART UNIT
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U.S. PATENT DOCUMENTS								
EXAMINER INITIAL		DO	OCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
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	AL		·					Yes No
	АМ							Yes No
·	AN							Yes No
	AO							Yes No
	AP							Yes
			OTHER (includ	ling Author,	Title, Date, Pertinent Page	s, etc.)	1	No
M	AR	<u>115</u>	Co-Pending U.S January 30, 200	. Patent Appl 2 (NOT PUBI	ication No. 10/058,292, Hart LISHED).	ley, J.L., a	and Brasch,	M.A., filed
	AS	<u>115</u>	Co-Pending U.S. Patent Application No. 10/640,422, Cheo, D., et al., filed August 14, 2003 (NOT PUBLISHED).					
	Ball, C.A. and Johnson, R.C. "Efficient Excision of Phage λ from the <i>Escherichia coli</i> Chromosome Requires the Fis Protein," <i>J. Bacteriol.</i> 173:4027-4031, American Society for Microbiology (July 1991).						a coli Society for	
EXAMINER			JAMES KETTER		2		NSIDERED	104
EXAMINER: Initi	al if refer	rence cop	onsidered, whether the	not citation is in communication t	conformance with MPEP 609. Draw to Applicant.	v line throug	h citation if not i	n conformance